



FLWEMS Paramedic Medication Information For:

IPRATROPIUM BROMIDE

(Atrovent)

(eye-prah-**TROH**-pee-um)

Pregnancy Category

B Ati-Ipratropium Bromide★ Apo-Ipravent★ Atrovent Novo-Ipramide★ PMS-Ipratropium★ (Rx)

Classification

Anticholinergic, quaternary ammonium compound

See Also

See also *Cholinergic Blocking Agents*.

Action/Kinetics

Chemically related to atropine. Antagonizes the action of acetylcholine. Prevents the increase in intracellular levels of cyclic guanosine monophosphate, which is caused by the interaction of acetylcholine with muscarinic receptors in bronchial smooth muscle; this leads to bronchodilation which is primarily a local, site-specific effect. Poorly absorbed into the systemic circulation. About 50% of unchanged drug excreted through the urine. $t_{1/2}$, elimination: 2 hr after inhalation.

Uses: Aerosol or solution

Bronchodilation in COPD, including chronic bronchitis and emphysema. Nasal spray: Symptomatic relief (using 0.03%) of rhinorrhea associated with allergic and nonallergic perennial rhinitis in clients over 6 years of age. Symptomatic relief (using 0.06%) of rhinorrhea associated with the common cold in those aged 5 and older. *NOTE:* The use of ipratropium with sympathomimetic bronchodilators, methylxanthines, steroids, or cromolyn sodium (all of which are used in treating COPD) are without side effects.

Contraindications

Hypersensitivity to atropine, ipratropium, or derivatives. Hypersensitivity to soy lecithin or related food products, including soy bean or peanut (inhalation aerosol). Use for initial treatment of acute bronchospasms.

Special Concerns

Use with caution in clients with narrow-angle glaucoma, prostatic hypertrophy, or bladder neck obstruction and during lactation. Safety and efficacy of the aerosol and solution have not been determined in children less than 12 years of age, of the nasal spray, 0.03%, in children less than 6 years of age, and of the nasal spray, 0.06%, in children less than 5 years of age. Use of ipratropium as a single agent for the relief of bronchospasm in acute COPD has not been studied adequately.

Side Effects

Inhalation aerosol. CNS: Cough, nervousness, dizziness, headache, fatigue, insomnia, drowsiness, difficulty in coordination, tremor. *GI:* Dryness of oropharynx, GI distress, dry mouth, nausea, constipation. *CV:* Palpitations, tachycardia, flushing. *Dermatologic:* Itching, hives, alopecia. *Miscellaneous:* Irritation from aerosol, worsening of symptoms, rash, hoarseness, blurred vision, difficulty in accommodation, drying of secretions, urinary difficulty, paresthesias, mucosal ulcers.

Inhalation solution. CNS: Dizziness, insomnia, nervousness, tremor, headache. *GI:* Dry mouth, nausea, constipation. *CV:* Hypertension, aggravation of hypertension, tachycardia, palpitations. *Respiratory:* Worsening of COPD symptoms, coughing, dyspnea, bronchitis, bronchospasm, increased sputum, URI, pharyngitis, rhinitis, sinusitis. *Miscellaneous:* Urinary retention, UTIs, urticaria, pain, flu-like symptoms, back or chest pain, arthritis.

Nasal spray. CNS: Headache, dizziness. *GI:* Nausea, dry mouth, taste perversion. *CV:* Palpitation, tachycardia. *Respiratory:* URI, epistaxis, pharyngitis, nasal dryness, miscellaneous nasal symptoms, nasal irritation, blood-tinged mucus, dry throat, cough, nasal congestion, nasal burning, coughing. *Ophthalmic:* Ocular irritation, blurred vision, conjunctivitis. *Miscellaneous:* Hoarseness, thirst, tinnitus, urinary retention. *All products. Allergic:* Skin rash; angioedema of the tongue, throat, lips, and face; urticaria, laryngospasm, oropharyngeal edema, *bronchospasm, anaphylaxis. Anticholinergic reactions:* Precipitation or worsening of narrow angle glaucoma, prostatic disorders, tachycardia, urinary retention, constipation, bowel obstruction, blurred vision, difficulty in accommodation..

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How Supplied

Aerosol: 0.018 mg/inh; Nasal Spray: 0.03%, 0.06%; Solution for Inhalation: 0.02%

Dosage

•Respiratory Aerosol *Treat bronchospasms.*

Adults: 2 inhalations (36 mcg) q.i.d. Additional inhalations may be required but should not exceed 12 inhalations/day.

•Solution for Inhalation *Treat bronchospasms.*

Adults: 500 mcg (1-unit-dose vial) given t.i.d.-q.i.d. by oral nebulization with doses 6-8 hr apart.

•Nasal Spray, 0.03% *Perennial rhinitis.*

Children, 6 years and older: 2 sprays (42 mcg) per nostril b.i.d.-t.i.d. for a total daily dose of 168-252 mcg/day. Optimum dose varies.

•Nasal Spray, 0.06% *Rhinitis due to the common cold.*

Children, 5 years and older: 2 sprays (84 mcg) per nostril t.i.d.-q.i.d. for a total daily dose of 504-672 mcg/day. The safety and efficacy for use for the common cold for more than 4 days have not been determined.

END OF INFORMATION – NOTHING FOLLOWS